

Substitute Form PTO-1449 (Modified) Information Disclosure Statement by Applicant (Use several sheets if necessary) JAN 04 2005 37 CFR § 1.98 PATENT & TRADEMARK OFFICE	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 15670-036001	Application No. 09/917,139
		Applicant Mihrimah Ozkan et al.	
		Filing Date July 26, 2001	Group Art Unit 2881

U.S. Patent Documents							
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
12	ABB	4,886,360	12/12/89	Finlan			
	ACC	4,887,721	12/19/81	Martin et al			
	ADD	4,893,886	01/16/90	Ashkin			
	AEE	4,908,112	03/13/90	Pace			
	AFF	5,029,791	07/09/91	Ceccon et al			
	AGG	5,079,169	01/07/92	Chu et al			
	AHH	5,100,627	03/31/92	Buican et al			
	AII	5,113,286	05/12/92	Morrison			
	AJJ	5,121,400	06/09/92	Verdiell et al			
	AKK	5,170,890	12/15/92	Wilson et al			
	ALL	5,189,294	02/23/93	Jackson et al			
	AMM	5,198,369	03/30/93	Itoh et al			
	ANN	5,206,504	04/27/93	Sridharan			
	AOO	5,212,382	05/18/93	Sasaki et al			
	APP	5,245,466	09/14/93	Burns et al			
	AQQ	5,274,231	12/28/93	Chu et al			
	ARR	5,283,417	02/01/94	Misawa et al			
	ASS	5,308,976	05/03/94	Misawa et al			
	ATT	5,327,515	07/05/94	Anderson et al			
	AUU	5,337,324	08/09/94	Ohtsu et al			
	AVV	5,338,930	08/16/94	Chu et al			
12	AWW	5,343,038	08/30/94	Nishiwaki et al			
	AXX	5,355,252	10/11/94	Haraguichi			
	AYY	5,360,764	11/01/94	Celotta et al			
	AZZ	5,363,190	11/08/94	Inaba et al			
12	AAAA	5,364,744	11/15/94	Buican et al			
	ABBB	5,374,566	12/20/94	Iranmanesh			

Examiner Signature

12

Date Considered

11/10/06

EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 15670-036001	Application No. 09/917,139
Information Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR §1.98(b))		Applicant Mihrimah Ozkan et al.	
		Filing Date July 26, 2001	Group Art Unit 2881

Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
<i>W</i>	ACCCCCCCC	BRONKHORST et al., "A New Method To Study Shape Recovery Of Red Blood Cells Using Multiple Optical Trapping", Biophys. J., 69, 5, November 1995, 1666-1673
	ADDDDDDDD	BUICAN et al., "Automated Single Cell Manipulation & Sorting By Light Trapping", Applied Optics, 26, 24, December 15, 1987, 5311-5316
	AEEEEEEEE	BURNS et al., "Optical Binding", Physical Review Letters, 63, 12, September 18, 1989, 1233-1236
	AFFFFFFFF	BURNS et al., "Optical Matter: Crystallization & Binding In Intense Optical Fields", Science, 249, 4970, August 17, 1990, 749-754
	AGGGGGGGG	BUSINESS WEEK, "Is There Anything A Laser Can't Do?", Business Week, October 30, 1989, 157
	AHHHHHHHH	BUSTAMANTE, "Direct Observation & Manipulation Of Single DNA Molecules Using Fluorescence Microscopy", Annu. Rev. Biophys. Biophys. Chem., 20, 1991, 415-446
	AIIIIIII	BUSTAMANTE et al., "Towards A Molecular Description Of Pulsed Field Gel Electrophoresis", Trends In Biotechnology, 11, 1993, 23-30
	AJJJJJJJ	BUSTAMANTE et al., "Manipulation Of Single DNA Molecules & Measurement Of Their Persistence, Length & Charge Density Under A Fluorescence Microscope", Abst. Of the 19th Mtg. Of Annual Mtg. Of Amer. Soc. For Photobiology, 53, June 22, 1991, 46S (Pergamon Press: Oxford).
	AKKKKKKKK	CALDWELL, "Field-Flow Fractionation", Analytical Chemistry, 60, 17, September 1, 1988, 959-971
	ALLLLLLLL	CHIOU et al., "Interferometric Optical Tweezers", Optics Communications, 133, January 1, 1997, 7-10
	AMMMMMMMM	CHOU et al., "A Microfabricated Device for Sizing & Sorting DNA Molecules", Proc. Natl. Acad. Sci. USA, 96, January 1999, 11-13
	ANNNNNNNN	CHOWDHURY et al., "Laser Induced Freezing", Physical Review Letters, 55, 8, August 19, 1985, 833-836
	AOOOOOOOO	CHOWDHURY et al., "All Optical Logic Gates Using Colloids", Microwave & Optical Technology Letters, 1, 5, July 1988, 175-178
	APPPPPPPP	CHOWDHURY et al., Exchange of Letters, Science, 252, May 24, 1991
	AQQQQQQQQ	CHU et al., "Experimental Observation Of Optically Trapped Atoms", Physical Review Letters, 57, 3, July 21, 1986, 314-317
	ARRRRRRRR	CLARK et al., "Single Colloidal Crystals", Nature, 281, 5726, September 6, 1979, 57-60
	ASSSSSSSS	CROCKER et al., "Microscopic Measurement Of The Pair Interaction Potential Of Charge Stabilized Colloid", Physical Review Letters, 73, 2, July 11, 1994, 352-355
	ATTTTTTTT	CROMIE, "Scientists Bind Matter With Light", Harvard University Gazette, October 13, 1989, 1, 4-5
<i>W</i>	AUUUUUUUU	DAVIES et al., "Optically Controlled Collisions Of Biological Objects", SPIE, 3260, January 25-28, 1998, 15-22

Examiner Signature <i>W</i>	Date Considered <i>2/1/03</i>
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Substitute Form PTO-1449
(Prescribed)U.S. Department of Commerce
Patent and Trademark OfficeAttorney's Docket No.
15670-036001Application No.
09/917,139**Information Disclosure Statement
by Applicant**
(Use several sheets if necessary)

(37 CFR §1.98(b))

Applicant
Mihrimah Ozkan et al.Filing Date
July 26, 2001Group Art Unit
2881**Other Documents (include Author, Title, Date, and Place of Publication)**

Examiner Initial	Desig. ID	Document
<i>me</i>	AVVVVVVVV	DHOLAKIA et al, "Optical Tweezers: The Next Generation", Physics World, October 2002, 31-35
	AWWWWWWWW	DUFRESNE et al, "Optical Tweezer Arrays & Optical Substrates Created With Diffractive Optics", Review Of Scientific Instruments, 69, 5, May 1998, 1974-1977
	AXXXXXXXX	ESENER, "Center For Chips With Heterogeneously Integrated Photonics (CHIPS), DARPA Opto Centers Kickoff, 11/08/00, Dana Point, CA
	AYYYYYYYY	FALLMAN et al., "Design For Fully Steerable Dual Trap Optical Tweezers", Applied Optics, 36, 10, April 1, 1997, 2107-2113
	AZZZZZZZZ	FISHER, "The Light That Binds", Popular Science, January 1990, 24-25
	AAAAAAAAA	FLYNN et al, "Parallel Transport Of Biological Cells Using Individually Addressable VCSEL Arrays As Optical Tweezers", Sensors & Actuators B, 87, 2002, 239-243
	ABBBBBBBBB	FOURNIER et al., "Writing Diffractive Structures By Optical Trapping", SPIE, 2406, February 6-8, 1995, 101-112
	ACCCCCCCC	FU et al, "A Microfabricated Fluorescence Activated Cell Sorter", Nature Biotechnology, 17, November 1999, 1109-1111
	ADDDDDDDDD	GASCOYNE, website printout, December 1, 2000
	AEEEEEEEE	GORRE-TALINI et al, "Sorting Of Brownian Particles By The Pulsed Application Of A Asymmetric Potential", Physical Review E, 56, 2, August 1997, 2025-2034
	AFFFFFFFFF	GRIER, "New Age Crystals", Nature, 389, 6653, October 23, 1997, 784-785
	AGGGGGGGGG	GREULICH et al, "The Light Microscope On Its Way From An Analytical To A Preparative Tool", Journal Of Microscopy, 167, Pt. 2, August 1, 1992, 127-151
	AHHHHHHHHH	GURRIERI et al, "Imaging Of Kinked Configurations Of DNA Molecules Undergoing Orthogonal Field Alternating Gel Electrophoresis By Fluorescence Microscopy", Biochemistry, 29, 13, April 3, 1990, 3396-3401
	AIIIIIIII	GURRIERI et al. Trapping Of Megabase Sized DNA Molecules During Agarose Gel Electrophoresis", Proc. Natl. Acad. Sci. USA, 96, January 1999, 453-458
	AJJJJJJJJ	HOLTZ et al, "Polymerized Colloidal Crystal Hydrogel Films As Intelligent Chemical Sensing Materials", Nature, 389, October 23, 1997, 829-832
	AKKKKKKKKK	HOUSEAL et al, "Imaging Of The Motions & Conformational Transitions Of Single DNA Molecules Using Fluorescence Microscopy", Biophys.J., 55, 324, February 12-16, 1989, 373a
	ALLLLLLLLL	HOUSEAL et al., "Real Time Imaging Of Single DNA Molecules With Fluorescence Microscopy", Biophys.J., 56, September 1989, 507-516
	AMMMMMMMMM	HUBER et al., "Isolation Of A Hyperthermophilic Archaeum Predicted By in situ RNA Analysis", Nature, 376, 6535, July 6, 1995, 57-58.
	ANNNNNNNNN	IMASAKA et al., "Optical Chromatography", Analytical Chemistry, 67, 11, June 1, 1995, 1763-1765
	AOOOOOOOOO	INSIDE R&D, "Matter Bound By Light", Inside R&D, 18, 43, October 25, 1989, 2
<i>not</i>	APPPPPPPPP	KUO et al., "Optical Tweezers In Cell Biology", Trends In Cell Biology, 2, April 1992, 116-118.

Examiner Signature

me

Date Considered

2/1/05

EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



Substitute Form PTO-1449 (Mandatory)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 15670-036001	Application No. 09/917,139
Information Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR §1.98(b))		Applicant Mihrimah Ozkan et al.	
		Filing Date July 26, 2001	Group Art Unit 2881

Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
<i>W</i>	AJJJJJJJJJ	ROGOVIN et al, "Bifurcation In Degenerate Four-Wave Mixing In Liquid Suspensions Of Microspheres", Physical Review Letters, 54, 20, May 20, 1985, 2222-2225
	AKKKKKKKKK	ROOSEN, "A Theoretical & Experimental Study Of The Stable Equilibrium Positions Of Spheres Levitated By Two Horizontal Laser Beams", Optics Communications, 21, 1, April 1977, 189-194
	ALLLLLLLLLL	SASAKI et al, "Laser Scanning Micromanipulation & Spatial Patterning Of Fine Particles", Japanese Journal Of Applied Physics, 31, 5B, May 1991, L907-L909
	MMMMMMMMMM	SASAKI et al., "Optical Micromanipulation Of A Lasing Polymer Particle In Water", Japanese Journal Of Applied Physics, Pt. 2, 32, 8B, August 15, 1993, L1144-L1147
	ANNNNNNNNN	SASAKI et al, "Optical Trapping Of A Metal Particle & A Water Droplet By A Scanning Laser Beam", Appl. Phys. Lett., 60, 7, February 17, 1992, 807-809
	AOOOOOOOOO	SHIKANO et al, "Separation Of A Single Cell By Red-Laser Manipulation", Applied Physics Letters, 75, 17, October 25, 1999, 2671-2673
	APPPPPPPPP	SMITH et al, "Four Wave Mixing In An Artificial Kerr Medium", Optics Letters, 6, 6, June 1981, 284-286
	AQQQQQQQQQ	SMITH et al, "Direct Mechanical Measurements Of The Elasticity Of Single DNA Molecules By Using Magnetic Beads", Science, 258, 5085, November 13, 1992, 1122-1126
	ARRRRRRRRR	SMITH et al, "Model & Computer Simulations Of The Motion Of DNA Molecules During Pulsed Field Gel Electrophoresis", Biochemistry, 30, 21, May 28, 1991, 5264-5274
	ASSSSSSSSS	SONEK et al, "Micromanipulation & Physical Monitoring Of Cells Using Two-Photon Excited Fluorescence In CW Laser Tweezers", SPIE, 2678, January 28-February 1, 1996, 62-68
	ATTTTTTTTT	SUZUKI et al, "Hysteric Behavior & Irreversibility Of Polymer Gels By pH Change", J. Chem. Phys., 103, 11, September 15, 1995, 4706-4710
	AUUUUUUUUU	SUZUKI et al., "Optical Switching In Polymer Gels", J. Appl. Phys., 80, 1, July 1, 1996, 131-136
	AVVVVVVVVV	SVOBODA et al, "Biological Applications In Optical Forces", Annu. Rev. Biophys. Biomol. Struct., 23, 1994, 247-285
	WWWWWWWWW	SVOBODA et al, "Conformation & Elasticity Of The Isolated Red Blood Cell Membrane Skeleton, Biophys. J., 63, 3, September 1, 1992, 784-793
	AXXXXXXXXXX	SWANSON et al, "Diffraction Optical Elements For Use In Infrared Systems", Optical Engineering, 28, 6, June 1989, 605-608
	AYYYYYYYYY	SWANSON, et al., A fully multiplexed CMOS biochip for DNA analysis; 2000; Sensors and Actuators B 64; pgs. 22-30
	AZZZZZZZZZ	TAKASHIMA et al., "Dielectric Dispersion Of DNA", J. Mol. Biol., 7, 5, November 1963, 455-467
<i>W</i>	AAAAAAAAAAAA	THIRUNAMACHANDRAN, "Intramolecular Interactions In The Presence Of An Intense Radiation Field", Molecular Physics, 40, 2, 1980, 393-399

Examiner Signature <i>W</i>	Date Considered <i>2/1/05</i>
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Substitute Form PTO-1449
(Modified)U.S. Department of Commerce
Patent and Trademark OfficeAttorney's Docket No.
15670-036001Application No.
09/917,139**Information Disclosure Statement
by Applicant**

(Use several sheets if necessary)

(37 CFR §1.98(b))

Applicant
Mihrimah Ozkan et al.Filing Date
July 26, 2001Group Art Unit
2881**Other Documents (include Author, Title, Date, and Place of Publication)**

Examiner Initial	Desig. ID	Document
<i>W</i>	ABBBBBBBBBBB	UNGER et al, "Monolithic Microfabricated Valves & Pumps By Multilayer Soft Lithography", Science, 288, April 7, 2000, 113-116
	ACCCCCCCCCCC	VANBLAADEREN et al, "Template Directed Colloidal Crystallization", Nature, 385, 6614, January 23, 1997, 321-324
	ADDDDDDDDDDD	VISSCHER et al, "Construction Of Multiple Beam Optical Traps With Nanometer Resolution Position Screening", IEEE Jnl Of Selected Topics In Quantum Electronics, 2, 4, December 1996, 1066-1075
	AEEEEEEEEEEE	WANG et al, "Integration Of Optoelectronic Array Devices For Cell Transport & Sorting", Photonics West 2001, January 20-26, 2001, San Jose, CA
	AFFFFFFFFFFF	WEBER et al, "Manipulation Of Cells, Organelles & Genomes By Laser Microbeam & Optical Trap", Intl. Rev. Of Cytology, 133, 1992, 1-41, (Academic Press: San Diego).
	AGGGGGGGGGGG	WEI et al, "Laser Trapping Microscopy As A Diagnostic Technique For The Study Of Cellular Response & Laser-Cell Interactions, SPIE, 2983, February 10-11, 1997, 22-28
	AHHHHHHHHHHH	WESTBROOK et al, "Localization Of Atoms In A Three Dimensional Standing Wave", Physical Review Letters, 65, 1, July 2, 1990, 33-36
	AAAAAAAAII	WHEELER, "Force Fields Of Laser Light Bind Molecules In A Remarkable Discovery At Harvard", The Chronicle Of Higher Education, October 25, 1989, A4
	AJJJJJJJJJJ	WRIGHT et al, "Radiation Trapping Forces On Microspheres With Optical Tweezers", Appl. Phys. Lett., 63, 6, August 9, 1993, 715-717
	AKKKKKKKKKKK	WUITE et al, "An Integrated Laser Trap/Flow Control Video Microscope For The Study Of Single Biomolecules", Biophys. Jnl., 79, 2, August 2000, 1155-1167
	ALLLLLLLLLLL	XIANG et al, "A Combinatorial Approach To Materials Discovery", Science, 268, 5218, June 23, 1995, 1738-1740
	AMMMMMMMMMMM	YABLONOVITCH, "Inhibited Spontaneous Emission In Solid State Physics & Electronics", Physical Review Letters, 58, 20, May 18, 1987, 2059-2062
	ANNNNNNNNNNN	YABLONOVITCH et al, "Photonic Band Structure: The Face Centered Cubic Face", Physical Review Letters, 63, 18, October 30, 1989, 1950-1953
	AOOOOOOOOOOO	YUQIU, "Mechanical, Electrical, & Chemical Manipulation Of Single DNA Molecules", Nanotechnology, 3, 1992, 16-20
	APPPPPPPPPP	ZAHN et al, "Fluorimetric Multiparameter Cell Assay At The Single Cell Level Fabricated By Optical Tweezers", FEBS Letters, 443, 1999, 337-340
<i>W</i>	AQQQQQQQQQQQ	ZEIDLER; Automated chromosome analysis; August 1988; Nature, vol. 334, No. 6183; pg. 635

Examiner Signature

W

Date Considered

2/1/05

EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.